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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,830	08/28/2003	Shinichiro Koto	242050US2SRD	6653
22850	7590	06/10/2008	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.			LU, TOM Y	
1940 DUKE STREET			ART UNIT	
ALEXANDRIA, VA 22314			PAPER NUMBER	
			2624	
			NOTIFICATION DATE	
			DELIVERY MODE	
			06/10/2008	
			ELECTRONIC	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/649,830	<b>Applicant(s)</b> KOTO ET AL.	
	<b>Examiner</b> Tom Y. Lu	<b>Art Unit</b> 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 7-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/28/2003; 6/24/2004; 4/26/2006; 8/18/2006;</u>               | 6) <input type="checkbox"/> Other: _____                          |
| <u>11/16/2006; 3/27/2007.</u>  |   |



## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of species I, claims 1-6 and 19 in the reply filed on 04/18/2008 is acknowledged.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-6 and 19 are rejected under 35 U.S.C. 102(a) as being anticipated by Oami et al ("Oami" hereinafter) (U.S. Patent No. 6,415,041 B1).
  - a. As per claim 1, Oami discloses a digital watermark embedding apparatus which generates an output image signal by embedding a digital watermark signal in an input image signal (abstract), comprising: a detector (the combination of digital watermark strength calculation 100 and storage device 101) which detects a signal characteristic (characteristic table, column 7, table 1) of at least one of the input image signal and the output image signal (see figure 5); and a control device (digital watermark insertion section 102) configured to control an embedding intensity of the digital watermark signal with respect to the input image signal in accordance with the signal characteristic (column 7, lines 6-10).

- b. As per claim 2, Oami discloses wherein the detector detects a signal intensity of the digital watermark signal which is extracted from the output image signal (figure 5, digital watermark detection section 202).
- c. As per claim 3, Oami discloses wherein the detector detects an image quality degradation degree of the output image signal with respect to the input image signal (figure 5, image-quality degradation degree calculation section 203).
- d. As per claim 4, Oami discloses wherein the detector detects an activity indicating complexity from at least one of the input image and the digital watermark signal (category classification section 204 detects the complexity from the input image).
- e. As per claim 5, Oami discloses wherein the detector comprises: first detector which detects a signal intensity of the digital watermark signal which is extracted from the output image signal (figure 5, digital watermark detection section 202); and a second detector which detects an activity indicating complexity from at least one of the input image signal and the digital watermark signal (category classification section 204 detects the complexity from the input image), and the control device controls the embedding intensity of the digital watermark signal with respect to the input image signal in accordance with the signal intensity and the activity (digital watermark insertion section 102, column 7, lines 6-10).
- f. As per claim 6, Oami discloses wherein the detector comprises: a first detector which detects an image quality degradation degree of the output image signal with respect to the input image signal (figure 5, image-quality degradation degree calculation section 203); and a second detector which detects an activity

indicating complexity from at least one of the input image signal and the digital watermark signal (category classification section 204 detects the complexity from the input image), and wherein the control device controls the embedding intensity of the digital watermark signal with respect to the input image signal in accordance with the image quality degradation degree and the activity (digital watermark insertion section 102, column 7, lines 6-10).

- g. As per claim 19, Oami discloses wherein the control device generates an embedding intensity control signal as a product (a digital watermark characteristic table) of a first embedding intensity adjustment quantity and a second embedding intensity adjustment quantity, and controls the embedding intensity by the embedding intensity control signal, the first embedding intensity adjustment quantity being for adjusting embedding intensity of the digital watermark signal by feedback control so that the image quality degradation degree detected by the first detector become not more than a predetermined threshold value, the second embedding intensity adjustment quantity being for adjusting the embedding intensity by feed-forward control so that a ratio of the activities of the input image signal and the digital watermark signal detected by the second detector become a fixed value (column 7, lines 40-67 and column 8, lines 1-15).

### ***Conclusion***

4. **Examiner note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teaching for the art and are applied to the specific

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limitations within the individual claim, other passages and figures may be applied as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potential teaching all or part of the claimed invention, as well as the context of the a passage as taught by the prior art or disclosed by the examiner.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Y. Lu whose telephone number is (571) 272-7393. The examiner can normally be reached on 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (571)-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tom Y Lu/

Examiner, Art Unit 2624